

CENTAF Bioenvironmental Engineering (AEF 9/10)



This Briefing is Unclassified



Deployed = Garrison?

Universal Approach
Similar/Same Equipment
Different Environment
Different Priorities



Overview



- **Background**
- **Deployment Milestones**
- **Lessons**

- EHSAs
- Radiation Safety
- Equipment (Part II)
- Water (Part II)
- Emergency Response (Part II)

Continuity





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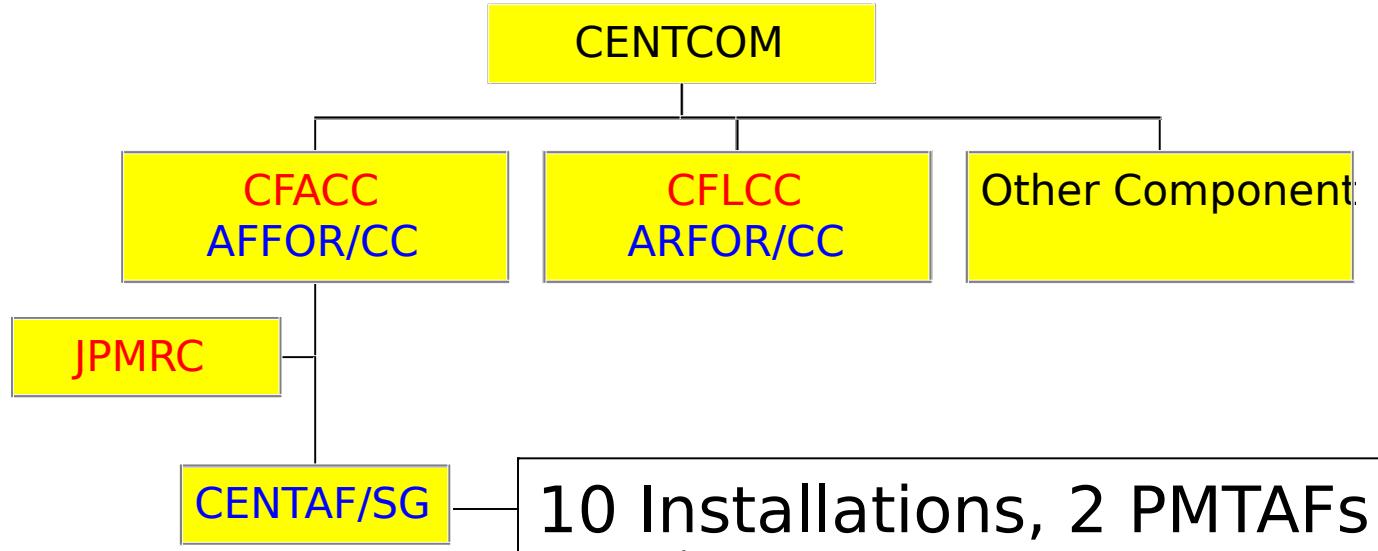




Background



The Big Picture





Background Deployment Phases



- Open the Base
- Establish the Base
- Operate the Base
- Sustainment



AFTTP 3-42.2



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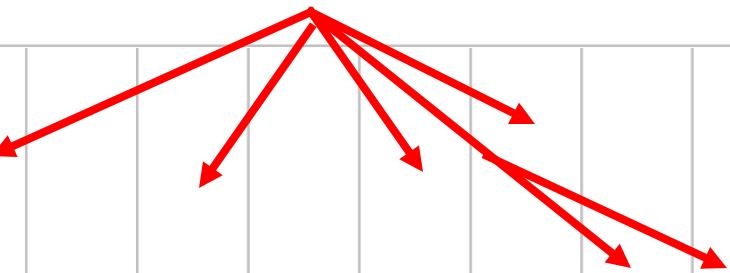
Milestones & Suspenses

	SIPRNET	Advisors/FPWG	Missions	PSO	PSO Appointee	PSO Det	Supply	Inventory	Verify	WVA	Walk Thru	Scheduled	SH60 Sampling	2015S	After Action Report
Al Dhatra	X	X	X	X		X									
Ali Al Salem	X	X	X	X					X						
Al Udeid	X	X	X	X		X				X					
Balad	X	X	X	X		X									
BIAP	X	X	X	X		X									
Diego	X	X	X	X					X						
Ganci	X	X	X	X					X						
Kirkuk	X	X	X	X					X						
Shahbaz	X	X	X	X					X						
Tallil	X	X	X	X					X						
PMTAF 1	X											X			
PMIAF 2	X											X			

Presumed Complete

Presumed Complete

AFIOH Review





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Background & References

- **EHSA Guide**
 - E-Mail
 - CD-ROM
 - CENTAF Kx Website
- **The Requirement = PRD 5**
- **The End Products**
 - Exposure Database
 - SF 600
 - IH SF 600 Supplement (AF Form 2755)



EHSA (Cont)



EHSA Process

- **Step #1: ID Areas of Concern (AOC's)**
 - Living & Work Areas (Where People Spend the Most Time)
 - Other On-Base Areas
 - Off Base Areas
 - Industrial Hygiene
- **Step #2: ID AOCs' Potential Hazards & Pathways**
- **Step #3: Assess Risk**
 - Hazard Severity (Sampling Data)
 - Hazard Frequency & Duration
 - Population Exposed
 - Use ORM Matrix to Derive Overall Score

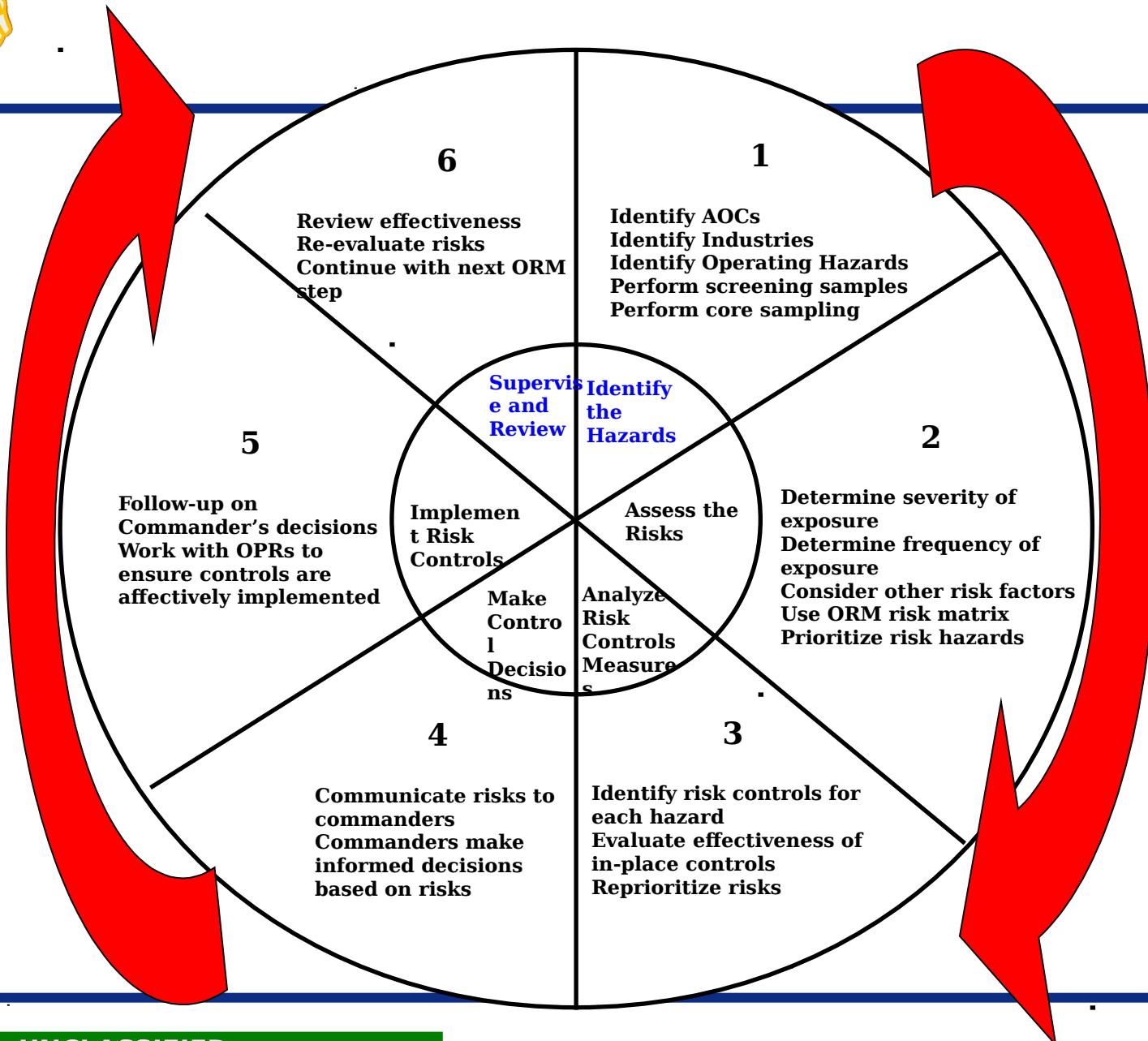


EHSA (cont)



- **Step #4: Determine Risk Control/Mitigation Measures**
- **Step #5: Communicate Risk to Decision-Makers**
- **Step #6: Implement Risk Control Measures**
- **Step #7: Supervise & Review**







EHSAs (cont)



- **Use Existing Data/Sampling Sources**
 - Real Estate EBSs
 - PM Teams
 - CHPMM SIPR Web Site <http://usachppm1.army.smil.mil/despcentcom.asp>
 - AFIOH SIPR Web Site
- **Sampling**
 - CHPPMEUR
- **AFIOH Support**



EHSA (Cont)



Minimum Samples

■ Soil

- On Site VOCs (PID), Metals (XRF) & Radiation (ADM)
- 30 x 30 Meter Grid -- Corners & Center
- CHPMM TG 251

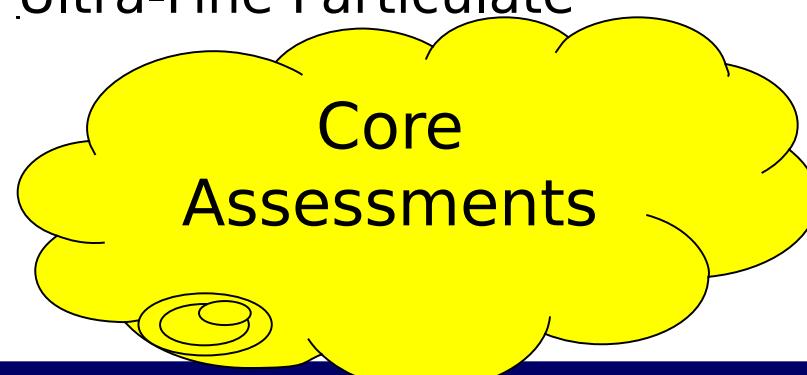
■ Perimeter Air

- All 4 Compass Directions
- PID/FID, ADM, Aerosol, Ultra-Fine Particulate

■ Surface Water

■ Potable Water

- Source Water
- After Treatment

A large, yellow, cloud-like graphic with irregular edges. Inside the cloud, the text "Core Assessments" is written in a black, sans-serif font, centered horizontally and vertically within the cloud area.

Core Assessments

Bed-Down Samples



EHSA (cont)



- **CHPPM Equipment**
- **CHPPM Website**
 - Prior Assessments
 - Equipment Tutorial
- **AFIOH Website**
- **Oil Fire Kit**





***What is the ultimate goal of
PRD-5?***

**■ Specific for Deployment Period**

- Malaria/Leishmaniasis
- Heat
- Aircraft/Mission (Do Not Specify)

CENTAF
Deliverable

■ Update With Current Data

- Sample Numbers, Dates and Information Source
- General Conclusion – Sample Results Versus Standard

■ AVOID Conclusions/Assertions**■ Acute vs. Chronic****■ Balad Example****■ Posted on AFKX Website****■ Filed in 1480As of Returning Deployers**



Shop Walk Thrus

- **“Deployment Unique” Exposures/Conditions**

- Heat (e.g., Increases Vapor Generation)
- Greater Number of Sorties
- Number of Aircraft
- Local Purchase Chemicals!

- **Rationale**

- Limited Exposure Duration
- “Routine” Covered Back Home

No CENTAF Deliverables
2755 Equivalent





Afghanistan Terrorist School

HUMAN
BOMB
CLASS

Pay attention,
because I'm only
going to do this
once, ok?





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Radiation Safety (RAM)

■ Permit Compliance

- Inventory - Database
 - Transitioning to Web-Based
- Wipe Samples!
- Storage Area Survey

Examples:

- LANTIRN Pods
- Troxlers
- MVACIS

■ Other Permitted Materials

- Prior Permission Required! Copy of Permit
- Permit Valid at "Temporary Sites Outside the U.S."
- Recipient's Authority to Receive

Deliverables:

- Database Update
- Storage Area Letter
- Fire Department Letter



Radiation Safety (cont)

■ Generally Licensed Devices

- Register with RIC
- Wipe Samples!
- Storage/Use Area Survey

■ TLDs

■ EMEDs Basic

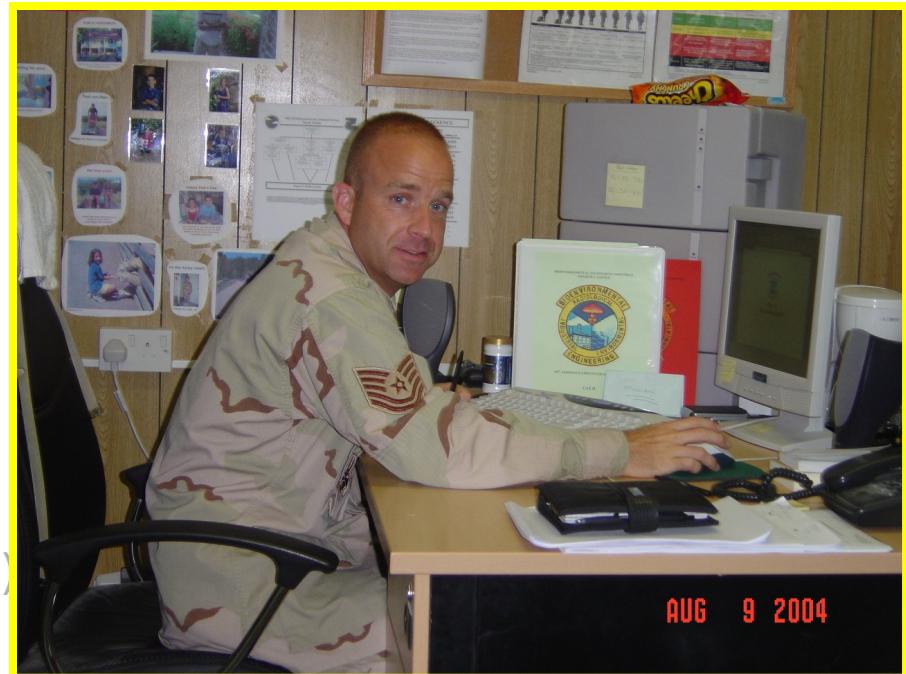




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Equipment (HAPSITE & HazMat IDs)



■ HAPSITES

- Notify CENTAF Upon Receipt
- Service Modules
- Inficon Servicing

Volatile & Semi
Volatile
Organic, Liquid/Gas

■ HazMat ID Match Criteria (Post in Instrument Lid)

- > 90% Numeric Match
- Spectral Match
 - Run Residual!
- Physical Properties/Appearance Consistent

http://www.sensir.com/newsensir/on_scene/Educational%20Corner.html

Liquid/Solid
Covalent Bonds



Equipment & Supplies (cont)

- **Order Missing Stuff! (Loggie)**
- **Supply Inventory “Honor System”**
- **No Standard Logistics/BMET Systems**
 - Submission From Tallil (ANG)
- **ADM-300 Data Call (SIPRNET)**
- **Calibration Issues**
 - Stagger Calibration
 - Obtain Duplicate Items

FFGL3&4 Every Site

Deliverables:

- Summary E-Mail (Equipment)
- SIPRNET ADM-300 Data



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- **Updated Guidance!**
 - AFI 48-144
 - AFMAN 48-138
- **Bottled Water**
 - Most Universal Exposure Pathway! (SF 600)
 - Chemical Analysis
 - Screening Samples
 - New Analysis Every 30 Days
 - Plastics?
- **“Non Potable” System Water?**
 - Showering
 - Ice
 - Food Preparation



Emergency Response





Conclusions = Continuity!

- **CENTAF Contact List**
- **CHPPM Customer Service Manual**
- **Sample Shipping Instructions**
- **Equipment Inventory/Calibration Schedule**
- **Supply Inventory/Expiration Dates**
- **RAM Inventory**
- **Water Sampling Plan**
- **EHSA Sampling Plan/Status**
- **WVA**
- **Shop List/Walkthrough Status**
- **SF 600 and 2755 Equivalents**

Deliverable:
•Smart Book

